

A Review on the Relationship between Social Media Usage, Social Media Sharing, and Depressive Symptoms among University Students

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University students were found to have high depressive symptoms, and one of the contributing factors may be social media usage. Multiple studies have found mixed results regarding the relationship between social media usage and depressive symptoms. Some studies found a significant negative relationship between social media usage and depressive symptoms, while several others found an indirect significant relationship or no relationship between these two variables. The difference may be due to other factors such as individuals sharing their positive and negative experiences on social media. Sharing positive experience was found to reduce negative affect (e.g. depression) while sharing negative experience was found to increase negative affect. Therefore, this literature review aims to review these topics, specifically, (1) the relationship between social media usage and depressive symptoms, (2) the relationship between social sharing and depressive symptoms, and (3) to integrate a possible explanation related to the relationship between social media usage, social sharing, and depressive symptoms.

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According to World Health Organization (2018), more than 300 million people suffer from depressive symptoms, globally and the number of people seeking for help from mental health providers has also increased (Mojtabai, Olfson, & Han, 2016). The Diagnostic Statistical Manual of Mental Disorders 5th Edition (DSM-5), defines depressive symptom as symptoms that make up clinical depression such as feeling sad on most days, markedly

diminished interest in daily activities, significant weight loss/gain, and insomnia. In general, the increase in depressive symptoms was significant among young adults (Mojtabai et al., 2016).

The rates of depressive symptoms in Asia Pacific region are also increasing, and it is comparable to the high rates in Europe and America (Chiu, 2004). Based on the National Health and Morbidity Survey,

Malaysia is one of the countries in Asia with high rates of depression as 1 in 5 adolescents aged 13 to 17 years old in Malaysia have shown symptoms of depression (Institute for Public Health, 2017). Additionally, mental health problem was prevalent among 29.2% of Malaysians above the age of 16 (Institute for Public Health, 2015).

Similar to global epidemiology, young adults in Malaysia also show a significant level of depressive symptoms (Shamsuddin, 2013). For example, a study was conducted to assess the prevalence of depressive symptoms among university students. It was found that 506 (or 27.5%) students between the ages of 18 and 24 had moderate depressive symptoms while 9.7% of them had severe or extremely severe depressive symptoms (Shamsuddin, 2013). The study also found that depressive symptoms were significantly higher among students aged 20 years and above in comparison to the students aged below 20.

Some studies found high social media usage might be associated with the increase in depressive symptoms (Lin et al., 2016). Therefore, it is important to investigate the relationship between social media use and depressive symptoms among young adults.

Going online is a common scenario among teenagers and young adults alike in today's world. Pew Research Centre reported that young adults aged 18 to 29 years and teenagers aged 12 to 17 years are the age groups that go online the most and both groups made up 93% of the total population (Lenhart, Purcell, Smith, & Zickuhr, 2010). Pew Research Centre's 2019 social media fact sheet also stated

that since 2006 until 2018, the 18 to 29 year old age group has the highest amount of people using social media (Pew Research Centre, 2019). Additionally, Malaysian Communications and Multimedia Commissions (2018) reported 30% of Malaysians in their 20's use the internet and they are the majority of internet users in Malaysia.

The internet population has grown tremendously since the early 2000 and young adults aged 18 to 29 years old still use the internet more than the other age groups (Pew Research Centre, 2019). Young adults would usually go online through a laptop or a smartphone to access their social media accounts (Lenhart et al., 2010).

Malaysian Communications and Multimedia Commissions (2016) reveal that students were found to spend the longest time on social media at 21 hours per week. This is supported by the National Health Morbidity Survey where 6 out of 7 high school students are found to be active users of social media (Institute for Public Health, 2017).

Since social media usage is common among young adults, and depressive symptoms may have a relationship with social media usage, understanding its relationship may benefit the population to take the necessary steps when using social media in preventing the occurrence of depression.

Social Media Use and Depressive Symptoms

Some studies found a negative relationship between social media use and depressive

symptoms. Lin and colleagues (2016) conducted a correlational study, assessing the relationship between social media usage and depressive symptoms among 1,787 young adults in the United States (U.S.). The participants were between 19 and 32 years old and consisted of 50.3% female. The participants answered a questionnaire that assessed their social media use and symptoms of depression. The results show that participants who spent more time on social media in a day and those with a higher frequency of visiting social media sites in a week had significantly associated with having depressive symptoms compared to those who did not spend as much time on social media.

Similar findings were found by Woods and Scott (2016) where 467 Scottish adolescents (age ranges 11 to 17) who had high use of social media had high levels of depression. They also added more variables to their study such as sleep quality, anxiety, and self-esteem.

Primack, Shensa, Escobar-Viera, Barrett, Sidani, Colditz, and James (2017) studied the relationship between the use of multiple social media platforms (e.g., Facebook, Instagram, and Twitter), symptoms of anxiety and depression among American young adults. A total of 1,768 participants aged between 19 and 32 years old had participated in the study. The results of the study show that participants who used more social media platforms have a higher self-reported level of depressive symptoms. Additionally, those who used more social media platforms also reported a higher level of symptoms of anxiety.

Shensa, Escobar-Viera, Sidani, Bowman, Marshal, and Primack (2017) studied the relationship between problematic social media usage (e.g., using too much of it that it negatively impacts job/studies) and depressive symptoms among young adults in the U.S. The participants were 1,749 individuals aged between 19 to 32 years old. The study found that higher problematic social media usage was correlated with higher depressive symptoms. The results of the study were similar to other studies on social media usage in general that a higher social media usage was significantly correlated with higher depressive symptoms.

There were also studies that found no significant relationship between social media use and depressive symptoms. Chow and Wan (2017) examined the roles of neuroticism, envy, and Facebook social comparison in the relationship between Facebook usage and depressive symptoms among Caucasian, Hispanic, Asian, and Native American in one of the crowdsourcing market place. The participants were 282 people aged between 18 and 73 years old. The study found no significant relationship between Facebook usage and depressive symptoms. Besides, there was no interactive effect between Facebook usage, Facebook social comparison, and envy. Furthermore, based on the hierarchical regression conducted, the age variable did not interact with Facebook usage, or with neuroticism, in predicting depressive symptoms.

Similar findings were found by Tandoc, Ferrucci, and Duffy (2015) and Jelenchick, Eickhoff, and Moreno (2013); there was no significant relationship found between the frequency of Facebook usage and

depressive symptoms. However, Tandoc, Ferrucci, and Duffy (2015) revealed envy as a significant mediator between Facebook use and depressive symptoms. Further analysis was conducted; when the feeling of Facebook envy was controlled, Facebook usage would decrease depressive symptoms.

Lup, Trub, and Rosenthal (2015) did a survey study on the relationship between Instagram use, depressive symptoms, negative social comparison, and the number of strangers followed. Strangers in this study included people or celebrities who they are not familiar with personally. Participants were 117 individuals aged between 18 and 29 years old, of which the majority of them were female. The overall results showed no statistical significant relationship between Instagram usage and depressive symptoms. The study also found that when more strangers were followed and more Instagram usage, social comparison and depressive symptoms were significantly lower. On the other hand, when fewer strangers were followed with more Instagram usage, social comparison and depressive symptoms were significantly higher.

Experience Sharing, Affect and Depressive Symptoms

Affect is defined as an expression of emotion or feeling. People with more symptoms of depression were found to have a higher level of negative affect and lower positive affect, while those who have a higher level of positive affect and lower negative affect reported lesser symptoms of depression (Dua &

Hargreaves, 1992; Forbes, Williamson, Ryan, & Dahl, 2004).

Gable, Reis, Impett, and Asher (2004) conducted two experimental studies that examined the relationship between intrapersonal and interpersonal outcomes and capitalizing (sharing personal events with others) on positive events. The first study consisted of 154 undergraduates (56 men, 98 women) that ranged between 17 and 26 years old. Meanwhile, the second study comprised 99 undergraduates (56 men, 98 women) ranging from 17 to 49 years old.

The results of the first study suggested that individuals who shared positive events had a higher life satisfaction and positive affect, above and beyond the importance of the most positive event and the most negative event of the day (Gable et al., 2004). The second study found participants who shared their personal positive events had a higher life satisfaction and positive affect, above and beyond the importance of the most positive and negative event of the day (Gable et al., 2004). Based on these two studies, people who shared their personal positive events had high positive affect. This indicates they had lower symptoms of depression.

Similar results were found by Choi and Toma (2014). They conducted an experimental study, which examined the relationship between sharing on social media and the emotional response of those who shared. The participants were 311 undergraduates with an average age of 20 years, and they were mostly women ($n = 249$). The participants were randomly assigned to a positive affect group and a negative affect group. The results showed

that participants who shared their personal positive events had a higher positive affect. Additionally, the study also found that those who shared their negative personal events had a higher negative affect. Since people who shared negative personal events had higher negative affect, this indicated they had more symptoms of depression.

Lambert, Gwinn, Baumeister, Strachman, Washburn, Gable, and Fincham (2013) conducted four experimental studies to investigate the relationship between sharing positive experience and positive affect. The participants in the causal studies ranged from 96 to 260 participants and the age of the participants in the four studies ranged from 18 to 41 years old.

The results of the first study showed that sharing positive events had a positive relationship with positive affect and life satisfaction. The results of the second study indicated that sharing positive experience led to increased positive affect. The conclusion of the third study was also consistent with the results of the first and second studies that sharing positive events caused positive emotions. Lastly, the fourth study also found that individuals who shared positive experience had significantly higher life satisfaction, happiness, and vitality. Overall, all four studies have shown that participants who shared their personal positive events, have higher positive affect.

Social Media Use, Social Media Sharing, and Depressive Symptoms

The literature discussed suggested mixed results relating to the relationship between

social media usage and symptoms of depression. Some studies found that more social media usage associated with higher level of depressive symptoms (Lin et al., 2016; Woods & Scott, 2016; Shensa et al., 2017), while some studies found either an indirect relationship or no relationship between social media usage and depressive symptoms (Tandoc et al., 2015; Lup et al., 2015; Jelenchick et al., 2013; Chow & Wan, 2017).

The different results obtained may be due to other factors confounding or mediating the relationship, such as positive and negative sharing on social media. Some studies suggested that sharing positive experience can increase positive affect while sharing negative experience can increase negative affect (Lambert et al., 2013; Choi & Toma, 2014; Gable et al., 2004). Therefore, one of the possible factors affecting the relationship between social media usage and depressive symptoms is the positive and negative sharing of individuals on social media.

Since the relationship between social media usage and depressive symptoms is inconsistent, it is suspected that there may be other factors affecting the relationship. People with depressive symptoms were found to have a higher negative affect, and social sharing was found to have an effect on the positive and negative affect of a person. Thus, social sharing might be a contributing factor to the inconsistent relationship between social media usage and depressive symptoms.

Based on these findings, researchers are encouraged to study the relationship between social media use, social sharing, and depressive symptoms. Future studies

in these areas should focus on examining whether positive sharing of individuals experience in social media would be a buffer of depressive symptoms among young people.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th edition). Washington, DC: American Psychiatric Publishing.
- Chiu, E. (2004). Epidemiology of depression in the Asia Pacific region. *Australasian Psychiatry*, 12(1), 4-10. doi: 10.1080/j.1039-8562.2004.02099.x-1
- Choi, M., & Toma, C. L. (2014). Social sharing through interpersonal media: Patterns and effects on emotional well-being. *Computers in Human Behavior*, 36, 530-541. doi:10.1016/j.chb.2014.04.026
- Chow, T. S., & Wan, H. Y. (2017). Is there any 'Facebook Depression'? Exploring the moderating roles of neuroticism, Facebook social comparison and envy. *Personality and Individual Differences*, 119, 277-282. doi:10.1016/j.paid.2017.07.032
- Dua, J., & Hargreaves, L. (1992). Effect of aerobic exercise on negative affect, positive affect, stress, and depression. *Perceptual and Motor Skills*, 75(2), 355-361. doi:10.2466/pms.1992.75.2.355
- Forbes, E. E., Williamson, D. E., Ryan, N. D., & Dahl, R. E. (2004). Positive and negative affect in depression: Influence of sex and puberty. *Annals of the New York Academy of Sciences*, 1021(1), 341-347. doi:10.1196/annals.1308.042
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228. DOI: 10.1037/0022-3514.87.2.228
- Jelenchick, L. A., Eickhoff, J. C., & Moreno, M. A. (2013). "Facebook depression?" Social networking site use and depression in older adolescents. *Journal of Adolescent Health*, 52(1), 128-130. doi:10.1016/j.jadohealth.2012.05.008
- Lambert, N. M., Gwinn, A. M., Baumeister, R. F., Strachman, A., Washburn, I. J., Gable, S. L., & Fincham, F. D. (2013). A boost of positive affect: The perks of sharing positive experiences. *Journal of Social and Personal Relationships*, 30(1), 24-43. doi: 10.1177/0265407512449400
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social media & mobile internet use among teens and young adults. millennials. *Pew Internet & American Life Project*. Retrieved from <https://files.eric.ed.gov/fulltext/ED525056.pdf>
- Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram# instasad?: exploring associations among instagram use, depressive symptoms, negative social comparison, and strangers followed. *Cyberpsychology, Behavior, and Social Networking*, 18(5), 247-252. doi.org/10.1089/cyber.2014.0560
- Malaysian Communications and Multimedia Commissions. (2018). *Internet users survey 2018*. Retrieved from

- <https://www.skmm.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018.pdf>
- Malaysian Communications and Multimedia Commissions. (2016). *Internet users survey 2016*. Retrieved from https://www.skmm.gov.my/skmmgovmy/media/General/pdf/IUS2015-Appendix_281216_final-20171016.pdf
- Mojtabai, R., Olfson, M., & Han, B. (2016). National trends in the prevalence and treatment of depression in adolescents and young adults. *Pediatrics*, 138(6), 1-10. Retrieved from <http://pediatrics.aappublications.org/content/138/6/e20161878.short>
- Institute for Public Health. (2017). *National health and morbidity survey 2017: Adolescent health survey 2017*. Retrieved from <http://iku.moh.gov.my/images/IKU/Document/REPORT/NHMS2017/AHSReportNHMS2017.pdf>
- Institute for Public Health. (2015). *National health and morbidity survey 2015: Non-communicable diseases, risk factors and other health problems*. Retrieved from <http://www.moh.gov.my/moh/resources/nhmsreport2015vol2.pdf>
- Pew Research Centre. (2019). *Internet/broadband fact sheet*. Retrieved from <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>
- Pew Research Centre. (2019). *Social media fact sheet*. Retrieved from <https://www.pewresearch.org/internet/fact-sheet/social-media/>
- Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among US young adults. *Computers in Human Behavior*, 69, 1-9. doi:10.1016/j.chb.2016.11.013
- Shamsuddin, K., Fadzil, F., Ismail, W. S. W., Shah, S. A., Omar, K., Muhammad, N. A., ... & Mahadevan, R. (2013). Correlates of depression, anxiety and stress among Malaysian university students. *Asian Journal of Psychiatry*, 6(4), 318-323. doi:10.1016/j.ajp.2013.01.014
- Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2017). Problematic social media use and depressive symptoms among US young adults: A nationally-representative study. *Social Science & Medicine*, 182, 150-157. doi.org/10.1016/j.socscimed.2017.03.061
- Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing?. *Computers in Human Behavior*, 43, 139-146. doi:10.1016/j.chb.2014.10.053
- Woods, H. C., & Scott, H. (2016). # Sleepyteens: social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal of Adolescence*, 51, 41-49. doi:10.1016/j.adolescence.2016.05.008
- World Health Organization. (2018). *Depression*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/depression>

Lin, L., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., ... & Primack, B. A. (2016). Association between social media use and depression among US young adults. *Depression and Anxiety*, 33(4), 323-331. doi:10.1002/da.22466